Tomorrow's combat uniforms enhance ability, reduce burden

By Donna Miles
American Forces Press Service

They call it the "Christmas tree"effect.

Defense engineers come up with the latest new gadgets and gizmos to help troops on the battlefield, and (just like ornaments being added to the holiday tree) they "hang" them on the warfighter.

As a result, troops carry a full combat load of 75, 100 or even 150 pounds.

"What warfighters are carrying today is just ridiculous," said Robert Kinney, director of the Individual Protection Directorate at the U.S. Army Soldier Systems Center in Natick, Mass.

"Our challenge is to provide greater protections and capabilities, but with less weight and bulk," Kinney said.

The goal, he said, is to incorporate new materials to reduce troop loads by almost half, to 50 pounds or less.

Tomorrow's warfighters, Kinney said, will wear uniforms with built-in chemical and biological protection, embedded with electric wires and fiber optics.

Uniforms will be waterproof and flame-resistant, with built-in insect repellent.

The Objective Force Warrior program offers a glimpse into advances planned for warfighters. The program is expected to become a prototype for all miltary service branches.

Antibacterial agents in the uniforms willhelp stop open injuries from getting infected, and antimicrobial agents will help keep odor in check.

New synthetic materials being explored will make the uniforms warmer in cold environments, cooler in hot ones, lighter and less bulky.

In addition, uniforms of the future will enable troops to adapt more to changing conditions.

They'll change color, chameleon-style, to reflect the surrounding environment.

Boots will come with snap-on soles for different terrains and removable liners that can be replaced when they get wet.

Headgear will take on a whole new dimension, protecting against ballistic and fragmentation injuries while serving as the wearer's personal "control center."

Tomorrow's helmets will integrate thermal sensors, video cameras and chemical and biological sensors.

Powering all the warfighter's gear will be a single battery, capable of running 24 hours or longer before being recharged.

For more information about the Soldier Systems Center visit www.natick.army.mil.

Satellite communication experts gather in Garmisch

Story & photos
by Hugh C. McBride

Communicators from around the world gathered in Garmisch Nov. 17 to 21 to discuss the status of the U.S. military's satellite communications system.

Co-hosted by Defense Information Systems Agency Europe and the Regional SATCOM Support Center Europe, "Transformation: SATCOM to the Edge" brought managers, policy makers and users together in an open forum to discuss the state of today's satellite communication network.

The annual SATCOM Working Group gathering is billed as "the premiere satellite communications forum of the year."

U.S. European Command Chief of Staff Lt. Gen. John Sylvester provided the conference's keynote address via video teleconference on a deployable military triband system using commercial satellite bandwidth.

The conference's four days consisted of briefings presented by representatives from the joint services, major commands, program managers, and other systems experts from throughout the military satellite communication community. In addition to these general meetings, smaller breakout groups were formed to discuss the capabilities of the Defense Satellite Communications System, the use of military and commercial satellites, and the employment of satellite communication in support of the global war on terrorism.

[Top and above] Lt. Col. Lucious Morton addresses SATCOM conference attendees during the first of the gathering's four days of general meetings and breakout sessions.

The event's 350 attendees also recognized the top satellite communications facilities in the European theater of operations.

Sigonella, Italy's NAVCOMTELSTA was honored as the DSCS facility of the year, while Royal Air Force Base Croughton earned the title of top STEP facility.